

Amendments to the Specification:

Please replace the paragraph beginning at page 18, line 6, with the following:

--Binding of the siRNA to a transcript corresponding to C10orf3 in the target cell results in a reduction in the protein production by the cell. The length of the oligonucleotide is at least 10 nucleotides and may be as long as the naturally-occurring [[the]] transcript. Preferably, the oligonucleotide is 19-25 nucleotides in length. Most preferably, the oligonucleotide is less than 75, 50, or 25 nucleotides in length. Examples of C10orf3 siRNA oligonucleotide which inhibit the expression in mammalian cells include the target sequence containing SEQ ID NO: 21. Furthermore, in order to enhance the inhibition activity of the siRNA, nucleotide “u” can be added to 3' end 3' end of the antisense strand of the target sequence. The number of “u”s to be added is at least 2, generally 2 to 10 (SEQ ID NO: 25), preferably 2 to 5. The added “u”s form single strand at the 3' end 3' end of the antisense strand of the siRNA.--

Please replace the paragraph beginning at page 18, line 18, with the following:

--Vectors are produced for example by cloning a C10orf3 target sequence into an expression vector operatively-linked regulatory sequences flanking the C10orf3 sequence in a manner that allows for expression (by transcription of the DNA molecule) of both strands (Lee, N.S., Dohjima, T., Bauer, G., Li, H., Li, M.-J., Ehsani, A., Salvaterra, P., and Rossi, J. (2002) Expression of small interfering RNAs targeted against HIV-1 rev transcripts in human cells. Nature Biotechnology 20 : 500-505.). An RNA molecule that is antisense to C10orf3 mRNA is transcribed by a first promoter (*e.g.*, a promoter sequence 3' of the cloned DNA) and an RNA molecule that is the sense strand for the C10orf3 mRNA is transcribed by a second promoter (*e.g.*, a promoter sequence 5' of the cloned DNA). The sense and antisense strands hybridize *in vivo* to generate siRNA constructs for silencing of the C10orf3 gene. Alternatively, two

constructs are utilized to create the sense and anti-sense strands of a siRNA construct. Cloned C10orf3 can encode a construct having secondary structure, e.g., hairpins, wherein a single transcript has both the sense and complementary antisense sequences from the target gene. A loop sequence consisting of an arbitrary nucleotide sequence can be located between the sense and antisense sequence in order to form the hairpin loop structure. Thus, the present invention also provides siRNA having the general formula 5'-[A]-[B]-[A']-3', wherein [A] is a ribonucleotide sequence corresponding to a sequence of nucleotides 1533-1551 (SEQ ID NO:21) of SEQ ID NO:1,

[B] is a ribonucleotide sequence consisting of 3 to 23 nucleotides, and

[A'] is a ribonucleotide sequence consisting of the complementary sequence of [A]. The loop sequence may be preferably 3 to 23 nucleotide in length. The loop sequence, for example, can be selected from group consisting of following sequences

(http://www.ambion.com/techlib/tb/tb_506.html). In the siRNA of the present invention, nucleotide “u” can be added to the 3' end 3' end of [A'], in order to enhance the inhibiting activity of the siRNA. The number of “u”s to be added is at least 2, generally 2 to 10 (SEQ ID NO:25), preferably 2 to 5. Furthermore, loop sequence consisting of 23 nucleotides [[]] also provides active siRNA (Jacque, J.-M., Triques, K., and Stevenson, M. (2002) Modulation of HIV-1 replication by RNA interference. *Nature* 418 : 435-438.)--

Please replace the paragraph beginning at page 19, line 27, with the following:

--For example, preferable siRNAs having hairpin structure of the present invention are shown below. In the following structure, the loop sequence can be selected from the group consisting of AUG, CCC, UUCG, CCACC, CTCGAG, AAGCUU, CCACACC, and UUCAAGAGA. Preferable loop sequence is UUCAAGAGA (“ttcaagaga” in DNA).
ggagagacugaaaacagag-[B]-cucuguuuucagucucucc (SEQ ID NO:26) (for target sequence of SEQ ID NO:21).--

Please replace the paragraph beginning at page 30, line 33, with the following:

--Total RNA was extracted with a Qiagen RNeasy kit (Qiagen Inc., Valencia, CA, USA) or Trizol reagent (Life Technologies, Inc.) according to the manufacturers' protocols. Ten-microgram aliquots of total RNA were reversely transcribed for single-stranded cDNAs using poly dT₁₂₋₁₈ primer (SEQ ID NO:27) (Amersham Biosciences Corp., Piscataway, NJ, USA) with Superscript II reverse transcriptase (Life Technologies). Each single-stranded cDNA preparation was diluted for subsequent PCR amplification by standard RT-PCR experiments carried out in 20- μ l volumes of PCR buffer (TAKARA). Amplification proceeded for 4 min at 94°C for denaturing, followed by 20 (for *GAPDH*), or 35 (for *C10orf3*) cycles of 94°C for 30 s, 60°C for 30 s, and 72°C for 45 s, in the GeneAmp PCR system 9700 (Perkin-Elmer, Foster City, CA). Primer sequences were;

for *GAPDH*: forward, 5'-ACAAACAGCCTCAAGATCATCAG-3' (SEQ ID No; 3) and
reverse, 5'-GGTCCACCACTGACACGTTG-3' (SEQ ID No; 4);

for *C10orf3*: forward, 5'- AGAGATCCGAAGAGCTCTTATCT-3' (SEQ ID No; 5) and
reverse: 5'- GATGCTCAGTGGCTGGATACT-3' (SEQ ID No; 6).--

Please replace the paragraph beginning at page 32, line 30, with the following:

--To prepare plasmid vector expressing short interfering RNA (siRNA), we amplified the genomic fragment of H1RNA gene containing its promoter region by PCR using a set of primers, 5'-TGGTAGCCAAGTGCAGGTTATA-3' (SEQ ID No; 11), and 5'- CCAAAGGGTTCTGCAGTTCA-3' (SEQ ID No; 12) and human placental DNA as a template. The product was purified and cloned into pCR2.0 plasmid vector using a TA cloning kit according to the supplier's protocol (Invitrogen). The *Bam*HI and *Xho*I fragment containing *H1RNA* was into pcDNA3.1(+) between nucleotides 56 and 1257, and the fragment was amplified by PCR using

5'-TGC GGATCC CAGAGCAGATTGTACTGAGAGT-3' (SEQ ID No; 13) and

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5'- CTCTATCTCGAGTGAGGCGGAAAGAACCA-3' (SEQ ID No; 14),

The ligated DNA became the template for PCR amplification with primers,

5'- TTTAAGCTTGAAGACCATTGGAAAAAAAAAAAAAC-3' (SEQ ID No; 15) and

5'-TTTAAGCTTGAAGACATGGGAAAGAGTGGTCTCA-3' (SEQ ID No; 16).

The product was digested with *Hind*III, and subsequently self-ligated to produce psiH1BX3.0 vector plasmid having a nucleotide sequence shown in ~~SEQ ID NO: 23~~ ~~SEQ ID NOS: 23 and 24~~.

The DNA ~~fragment~~ fragment encoding siRNA was inserted ~~into the GAP at~~ between nucleotide 489-492 ~~488 and 489~~ as indicated (→ (----) in the following plasmid sequence (~~SEQ ID No: 23~~ ~~SEQ ID NOS: 23 and 24~~).--

Please cancel the present "SEQUENCE LISTING", pages 1-10, submitted August 15, 2006, and insert therefor the accompanying paper copy of the Substitute Sequence Listing, page numbers 1 to 11, at the end of the application.